

AMENDMENTS TO THE CLAIMS:

1. (Cancelled)
2. (Cancelled)
3. (Currently Amended) The spinal construct of claim ~~73~~ 76, wherein said second pair of side surfaces are arranged substantially parallel to one another.
4. (Withdrawn and Currently Amended) The spinal construct of claim ~~73~~ 76, wherein said second pair of side surfaces are angled relative to one another to define a taper extending along said longitudinal axis corresponding to the natural lordotic angle between the adjacent vertebral bodies.
5. (Withdrawn and Currently Amended) The spinal construct of claim ~~73~~ 76, wherein said first pair of side surfaces are angled relative to one another to define a taper extending along said longitudinal axis to facilitate insertion of said spinal implant within the intervertebral space between the adjacent vertebral bodies.
6. (Currently Amended) The spinal construct of claim ~~73~~ 76, wherein said spinal implant has a substantially rectangular transverse cross section and includes a transitional surface at diagonally opposite corner portions of said spinal implant extending between said first pair of side surfaces and said second pair of side surfaces to facilitate rotation of said spinal implant within the intervertebral space about said longitudinal axis.
7. (Original) The spinal construct of claim 6, wherein said transitional surface comprises a rounded surface.
8. (Previously Presented) The spinal construct of claim 63, wherein said first transverse dimension is oriented substantially perpendicular to said second transverse dimension.

9. (Cancelled)

10. (Previously Presented) The spinal construct of claim 63, further comprising an interlock between said spinal implant and said elongate member to selectively prevent at least one of rotational and lateral movement of said spinal implant relative to said elongate member subsequent to alignment of said second transverse dimension along said select height of the intervertebral space.

11. (Original) The spinal construct of claim 10, wherein said interlock prevents both rotational and lateral movement of said spinal implant relative to said elongate member.

12. (Original) The spinal construct of claim 10, wherein said interlock comprises:
at least one projection portion extending from one of said spinal implant and said elongate member; and
at least one aperture defined by another of said spinal implant and said elongate member;
and

wherein insertion of said at least one projection portion into a respective one of said at least one aperture prevents said at least one of rotational and lateral movement of said spinal implant relative to said elongate member.

13. (Original) The spinal construct of claim 12, further comprising a fastener; and
wherein insertion of said at least one projection portion into said respective one of said at least one aperture is accomplished by engagement of said fastener between said elongate member and said spinal implant.

14. (Original) The spinal construct of claim 13, wherein said elongate member includes a passage extending therethrough and said spinal implant includes a threaded opening;
and

wherein said engagement comprises inserting said fastener through said passage in said elongate member and threading said fastener into said threaded opening in said spinal implant.

15. (Currently Amended) The spinal construct of claim 12, wherein ~~said spinal implant is rotatably engaged with said elongate member to allow rotation of said spinal implant relative to said elongate member about said longitudinal axis~~, said at least one projection portion and said at least one aperture each being offset from said longitudinal axis.

16. (Withdrawn) The spinal construct of claim 12, wherein said interlock comprises: at least two projection portions extending from said one of said spinal implant and said elongate member; and at least two apertures defined by said another of said spinal implant and said elongate member; and

wherein insertion of said at least two projection portions into respective ones of said at least two apertures prevents said at least one of rotational and lateral movement of said spinal implant relative to said elongate member.

17. (Cancelled)

18. (Currently Amended) The spinal construct of claim ~~17~~ 80, wherein said bone growth promoting material comprises a bone morphogenic protein.

19. (Previously Presented) The spinal construct of claim 63, wherein an axially facing portion of said spinal implant defines at least two tool engaging elements to facilitate rotation of said spinal implant within said intervertebral space about said longitudinal axis.

20. (Previously Presented) The spinal construct of claim 19, wherein said tool engaging elements are apertures.

21. (Original) The spinal construct of claim 19, wherein said tool engaging elements are positioned diametrically opposite one another relative to said longitudinal axis.

22. (Previously Presented) The spinal construct of claim 21, wherein said elongate member defines a pair of arcuate slots positioned diametrically opposite one another relative to said longitudinal axis, said arcuate slots being sized and configured to receive said tool engaging elements during rotation of said spinal implant about said longitudinal axis.

23. (Previously Presented) The spinal construct of claim 63, wherein said spinal implant has a substantially rectangular transverse cross section.

24. (Previously Presented) The spinal construct of claim 63, wherein said elongate member comprises a plate having first and second end portions and wherein said bone anchors comprise bone screws, said plate defining at least one opening adjacent each of said first and second end portions for receiving one of said bone screws therethrough for engaging said plate to the adjacent vertebral bodies.

25. (Cancelled)

26. (Cancelled)

27. (Currently Amended) The spinal implant assembly of claim 87, A spinal implant assembly, comprising:

a device adapted for insertion into an intervertebral space between an adjacent pair of vertebral bodies, said device extending along a longitudinal axis and including:

a pair of primary side surfaces spaced apart and arranged generally opposite one another to define a primary transverse dimension; and

a pair of secondary side surfaces spaced apart and arranged generally opposite one another to define a secondary transverse dimension sized for insertion into the intervertebral space, said primary transverse dimension sized greater than said secondary transverse dimension and corresponding to a select height of said intervertebral space;

wherein said device has a substantially rectangular transverse cross section and

includes a rounded transitional surface at diagonally opposite corner portions of said device extending between said pair of primary side surfaces and said pair of secondary side surfaces to facilitate rotation of said device within the intervertebral space about said longitudinal axis; and

an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies to establish said select height of the intervertebral space and to maintain said select height of the intervertebral space, said device being rotatable relative to said elongate member about said longitudinal axis to align said primary transverse dimension along said select height of the intervertebral space to thereby provide controlled compression of said device; and

wherein said device comprise an intervertebral fusion device including a hollow interior with openings extending through said second pair of side surfaces and in communication with said hollow interior; and

further comprising a bone growth promoting material positioned within said hollow interior to facilitate fusion with the adjacent vertebral bodies.

28. (Currently Amended) The spinal implant assembly of claim 82 27, wherein said primary transverse dimension is oriented substantially perpendicular to said secondary transverse dimension.

29. (Currently Amended) The spinal implant assembly of claim 82 27, wherein said device is rotatably engaged with said elongate member to allow selective rotation of said device relative to said elongate member about said longitudinal axis, said selective rotation of said device serving to align said primary transverse dimension along said select height of the intervertebral space.

30. (Currently Amended) The spinal implant assembly of claim 82 27, further comprising an interlock between said device and said elongate member to selectively prevent at least one of rotational and lateral movement of said device relative to said elongate member subsequent to alignment of said primary transverse dimension along said select height of the intervertebral space.

31. (Original) The spinal implant assembly of claim 30, wherein said interlock comprises:

at least one projection portion extending from one of said device and said elongate member; and at least one aperture defined by another of said device and said elongate member; and

wherein insertion of said at least one projection portion into a respective one of said at least one aperture prevents said at least one of rotational and lateral movement of said device relative to said elongate member.

32. (Currently Amended) A spinal implant assembly, comprising:

a device comprising a fusion cage adapted for insertion into an intervertebral space between an adjacent pair of vertebral bodies, said device extending along a longitudinal axis and defining a primary transverse dimension and a secondary transverse dimension, said secondary transverse dimension sized for insertion into the intervertebral space, said primary transverse dimension sized greater than said secondary transverse dimension and corresponding to a select height of said intervertebral space;

a bone growth promoting material positioned within said fusion cage to facilitate fusion with the adjacent vertebral bodies; and

an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies to establish said select height of the intervertebral space and to maintain said select height as said device is rotated about said longitudinal axis to align said primary transverse dimension along said select height to thereby provide controlled compression of said device; and

wherein said fusion cage is rotatably coupled with said elongate member to allow selective rotation of said spinal implant relative to said elongate member about said longitudinal axis to align said secondary transverse dimension along said select height of the intervertebral space to thereby provide controlled compression of said fusion cage.

33. (Currently Amended) ~~The spinal implant assembly of claim 82, wherein said spinal implant has~~ A spinal implant assembly, comprising:

an intervertebral fusion device adapted for insertion into an intervertebral space between an adjacent pair of vertebral bodies and including one or more openings configured to promote fusion with the adjacent vertebral bodies, wherein said intervertebral fusion device includes a hollow interior with said openings in communication with said hollow interior and a bone growth promoting material positioned within said hollow interior to facilitate fusion with the adjacent vertebral bodies, said device extending along a longitudinal axis and having a parallelepiped configuration defining a primary transverse dimension and a secondary transverse dimension, said secondary transverse dimension sized for insertion into the intervertebral space, said primary transverse dimension sized greater than said secondary transverse dimension and corresponding to a select height of said intervertebral space; and

an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies to establish said select height of the intervertebral space and to maintain said select height as said device is rotated about said longitudinal axis to align said primary transverse dimension along said select height to thereby provide controlled compression of said device.

34.-62. (Cancelled)

63. (Currently Amended) A spinal construct for engagement with adjacent vertebral bodies, comprising:

a spinal implant comprising an intervertebral fusion device including one or more openings configured to promote fusion with the adjacent vertebral bodies, wherein said intervertebral fusion device includes a hollow interior with said openings in communication with said hollow interior, said spinal implant extending along a longitudinal axis and having a first transverse dimension sized for insertion within an intervertebral space between the adjacent vertebral bodies and a second transverse dimension greater than said first transverse dimension and corresponding to a select height of said intervertebral space;

a bone growth promoting material positioned within said hollow interior to facilitate

fusion with the adjacent vertebral bodies; and

an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies to establish said select height of the intervertebral space and to maintain said select height as said spinal implant is transitioned from said first transverse dimension to said second transverse dimension along said select height to thereby provide controlled compression of said spinal implant, and wherein said spinal implant is rotatably coupled with said elongate member to allow selective rotation of said spinal implant relative to said elongate member about said longitudinal axis to align said second transverse dimension along said select height.

64. (Cancelled)

65. (Currently Amended) The spinal construct of claim 64 63, wherein said bone growth promoting material comprises a bone morphogenic protein.

66. (Previously Presented) The spinal construct of claim 63, wherein said intervertebral fusion device comprises a fusion cage.

67. (Previously Presented) The spinal construct of claim 63, wherein said intervertebral fusion device is formed of a porous material to facilitate fusion with the adjacent vertebral bodies.

68. (Previously Presented) The spinal construct of claim 67, wherein said openings comprise pores defined by said porous material.

69. (Previously Presented) The spinal construct of claim 63, wherein said spinal implant includes:

a first pair of side surfaces spaced apart and arranged generally opposite one another to define said first transverse dimension; and

a second pair of side surfaces spaced apart and arranged generally opposite one another to define said second transverse dimension.

70. (Currently Amended) The spinal construct of claim 69, wherein ~~said spinal implant is rotatable relative to said elongate member about said longitudinal axis to align said second transverse dimension along said select height of the intervertebral space~~ said second pair of side surfaces are arranged substantially parallel to one another.

71. (Currently Amended) The spinal construct of claim 70, wherein ~~said spinal implant is rotatably coupled with said elongate member~~ said spinal implant has a substantially rectangular transverse cross section.

72. (Cancelled)

73. (Cancelled)

74. (Currently Amended) The spinal construct of claim ~~73~~ 76, wherein said intervertebral fusion device is formed of a porous material to facilitate fusion with the adjacent vertebral bodies.

75. (Currently Amended) The spinal construct of claim ~~73~~ 76, wherein said first transverse dimension is oriented substantially perpendicular to said second transverse dimension.

76. (Currently Amended) ~~The spinal construct of claim 73~~ A spinal construct for engagement with adjacent vertebral bodies, comprising:

a spinal implant extending along a longitudinal axis and including:
a first pair of side surfaces spaced apart and arranged generally opposite one another to define a first transverse dimension sized for insertion within an intervertebral space between the adjacent vertebral bodies; and
a second pair of side surfaces spaced apart and arranged generally opposite one

another to define a second transverse dimension greater than said first transverse dimension and corresponding to a select height of said intervertebral space;

an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies to establish said select height of the intervertebral space and to maintain said select height of the intervertebral space, wherein said spinal implant is rotatably coupled with said elongate member to allow selective rotation of said spinal implant relative to said elongate member about said longitudinal axis to align said second transverse dimension along said select height of the intervertebral space to thereby provide controlled compression of said spinal implant; and

wherein said spinal implant comprises an intervertebral fusion device including a hollow interior with openings extending through said second pair of side surfaces and in communication with said hollow interior; and

further comprising a bone growth promoting material positioned within said hollow interior to facilitate fusion with the adjacent vertebral bodies.

77. (Currently Amended) The spinal construct of claim 73 76, wherein said elongate member comprises a plate define a first opening overlapping one of the adjacent vertebral bodies and a second opening overlapping another of the adjacent vertebral bodies; and

wherein said bone anchors comprise bone screws extending through said first and second openings for engaging said plate to the adjacent vertebral bodies.

78. (Currently Amended) The spinal construct of claim 47 80, wherein said spinal implant includes:

a first pair of side surfaces spaced apart and arranged generally opposite one another to define said first transverse dimension; and

a second pair of side surfaces spaced apart and arranged generally opposite one another to define said second transverse dimension.

79. (Cancelled)

80. (Currently Amended) The spinal construct of claim 79 A spinal construct for engagement with adjacent vertebral bodies, comprising:

a spinal implant comprising a fusion cage extending along a longitudinal axis and having a first transverse dimension sized for insertion within an intervertebral space between the adjacent vertebral bodies and a second transverse dimension greater than said first transverse dimension and corresponding to a select height of said intervertebral space;

a bone growth promoting material positioned within said fusion cage to facilitate fusion with the adjacent vertebral bodies; and

an elongate member sized to span the intervertebral space and a plurality of bone anchors extending transversely from said elongate member and into engagement with the adjacent vertebral bodies to establish said select height of the intervertebral space and to maintain said select height as said spinal implant is transitioned from said first transverse dimension to said second transverse dimension along said select height to thereby provide controlled compression of said spinal implant, wherein said spinal implant is rotatably coupled with said elongate member and is rotatable relative to said elongate member about said longitudinal axis to align said second transverse dimension along said select height of the intervertebral space to provide controlled compression of said spinal fusion implant.

81. (Currently Amended) The spinal construct of claim 47 80, wherein said elongate member comprises a plate define a first opening overlapping one of the adjacent vertebral bodies and a second opening overlapping another of the adjacent vertebral bodies; and

wherein said bone anchors comprise bone screws extending through said first and second openings for engaging said plate to the adjacent vertebral bodies.

82.-88. (Cancelled)

89. (Currently Amended) The spinal implant assembly of claim 32, wherein said device includes:

a first pair of side surfaces spaced apart and arranged generally opposite one another to define said primary transverse dimension; and

a second pair of side surfaces spaced apart and arranged generally opposite one another to define said secondary transverse dimension; and

~~wherein said device is rotatable relative to said elongate member about said longitudinal axis to align said second transverse dimension along said select height of the intervertebral space to provide controlled compression of said spinal fusion implant.~~

90. (Previously Presented) The spinal implant assembly of claim 32, wherein said elongate member comprises a plate define a first opening overlapping one of the adjacent vertebral bodies and a second opening overlapping another of the adjacent vertebral bodies; and

wherein said bone anchors comprise bone screws extending through said first and second openings for engaging said plate to the adjacent vertebral bodies.

91. (New) The spinal implant assembly of claim 32, wherein said device has a substantially rectangular transverse cross section.

92. (New) The spinal implant assembly of claim 89, wherein said device has a substantially rectangular transverse cross section.

93. (New) The spinal implant assembly of claim 92, wherein said device includes a transitional surface at diagonally opposite corner portions of said fusion cage and extending between said first pair of side surfaces and said second pair of side surfaces to facilitate rotation of said fusion cage within the intervertebral space about said longitudinal axis.

94. (New) The spinal implant assembly of claim 93, wherein said transitional surface comprises a rounded surface.

95. (New) The spinal construct of claim 76, wherein said spinal implant has a substantially rectangular transverse cross section.

96. (New) The spinal construct of claim 80, wherein said spinal implant has a substantially rectangular transverse cross section.

97. (New) The spinal implant assembly of claim 33, wherein said intervertebral fusion device is rotatably coupled with said elongate member and is rotatable relative to said elongate member about said longitudinal axis to align said primary transverse dimension along said select height of the intervertebral space to provide controlled compression of said intervertebral fusion device.